

REMARKS:

This is a full and complete response to the Office action dated May 14, 2008. Reconsideration of the claims is respectfully requested.

REGARDING THE CLAIMS:

Claims 1-3, 6, 8-10, and 13 are pending in the application. Claims 1, 9 and 10 have been amended for clarification, new claims 18-21 added and claims 4-5, 7, 11-12 and 14-15 are canceled. Support for said amendments is discussed below. No new matter has been added.

PRIORITY

The Examiner has objected to the claim of priority of the present application to US 09/347,531 ('531) arguing that support for the claims is not found therein. Applicants respectfully disagree.

In particular, the Examiner argues that support is not shown with respect to "any organism." *See Office Action, 5/14/08, page 3.* Applicants respectfully note that amended claim 1 recites "an organism being a fungus or plant" and amended claim 9 recites an "organism selected from the group consisting of a plant and a fungus." Additionally, claims 18 and 19 recite wherein the "fungus is a yeast." Support for the these recitations can be found in the '531 application which in its examples disclose plant and yeast organisms. Specifically, Example 4 shows activity of $\Delta 6$ -desaturase cDNA of *P. patens* in yeast and additionally, Example 5 shows activity in rape plants.

Additionally, the Examiner argues that no support is shown for a feature where an organism contains at least 1 mol% of unsaturated fatty acid based on the total fatty acid content of the organism. Applicants note that amended claim 1 recites "from 1 to 40 mol%." Applicants respectfully note that with respect to numerical ranges, it must be taken into account what one of skill in the art would consider inherently supported in the application. *See MPEP 2163.05(II).* Accordingly, examples in the application can provide support for such numerical ranges. In the present application, support for this

can be found in the application on page 6, table 2. As noted therein the amounts of unsaturated fatty acids can be up to 80% of the total fatty acid content. Thus, the '531 application provides support for the present claims.

Furthermore, the Examiner has argued that the recited feature "without substantially reducing the $\Delta 6$ -desaturase activity of the polypeptide" is not supported in the Application. As noted in the MPEP, the written description is satisfied when the specification describes the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *See MPEP §2163 (I)*. Applicants note that on page 2, 2nd paragraph of the '531 application shows several variants of the $\Delta 6$ -desaturase sequence. *See Application, page 2*. For example, the $\Delta 6$ -desaturase can have a polypeptide sequence produced by insertion, deletion, or substitution or combination of up to 40%, and up to 20% of all amino acids. *See Application, page 2*. Thus, it is noted on page 2 of the application that even with the variants of the $\Delta 6$ -desaturase sequence, such variants still have $\Delta 6$ -desaturase activity. In view of this, it would be clear to one of ordinary skill in the art that such variant $\Delta 6$ -desaturase would have substantially the same activity as the unchanged $\Delta 6$ -desaturase. Accordingly, such variants would have $\Delta 6$ -desaturase activity without substantial reduction. Therefore, one of skill in the art could reasonably conclude that the application provides sufficient support for the claimed invention.

PRIORITY – DE 100 30 976.2

The Examiner objected to foreign priority stating that the translated copy was not filed together with a statement that the translation of the certified copy is accurate. Applicants respectfully submit that pending client documentation, the requisite documentation will be provided.

IN RESPONSE TO THE OFFICE ACTION:

REJECTION UNDER 35 U.S.C. § 102:

Claims 1-4, 7-9, 13-14 and 15 stand rejected under 35 USC §102(b) as being anticipated by Girke et al., Plant J., July 27 1998, Vol. 15 (“**Girke**”). Applicants respectfully traverse this rejection. Claims 5-6 and 10 stand rejected under 35 USC §103(a) as being unpatentable over Girke in view of Napier et al., Curr. Opin. Plant Bio. Apr., 1999 2:123-127 (“**Napier**”). Applicants respectfully traverse these rejections.

As noted above, support for the presently amended claims can be found in the ‘531 application. Accordingly, priority of the present claims extends to the filing of the ‘531 application, namely July 6, 1999. As the **Girke** reference was not published more than 1 year before the priority date of the present application, Applicants respectfully note that the above rejection under 35 USC §102(b) is inapplicable. Additionally, and for similar reasons, the **Girke** reference cannot be used as a basis for rejection under 35 USC §103. Accordingly, Applicants request the above mentioned rejections be withdrawn.

REJECTION UNDER 35 U.S.C. § 112:

Claims 1-3 and 7-8 stand rejected under 35 USC §112, first paragraph, for lack of enablement. The Examiner argues that the specification does not enable any person skilled in the art to which it pertains, to make and use the invention commensurate in scope with the claims. Specifically, the Examiner takes the position that the specification does not reasonably provide enablement for the expression of the recited Δ6-desaturases in animals.

As noted above, Applicants have amended claim 1 to recite “an organism being a fungus or plant” and amended claim 9 to recite an “organism selected from the group consisting of a plant and a fungus.” As the claims recite “plant” or “fungus” applicants respectfully assert that the present claims satisfy the enablement requirement. Accordingly, Applicants respectfully request the above mentioned rejection be withdrawn.

In view of the comments above, it is respectfully requested that the rejections be withdrawn and a Notice of Allowance issue with respect to the currently pending claims.

The undersigned representative requests any extension of time that may be deemed necessary to further the prosecution of this application.

The undersigned representative authorizes the Commissioner to charge any additional fees under 37 C.F.R. 1.16 or 1.17 that may be required, or credit any overpayment, to Deposit Account No. 14-1437, referencing Attorney Docket No.: 0093/000032.

In order to facilitate the resolution of any issues or questions presented by this paper, the Examiner may directly contact the undersigned by phone to further the discussion.

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